A New Species of Faramea (Rubiaceae) from Costa Rica

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ABSTRACT. Faramea zamorensis, a new species from Costa Rica, is described and illustrated. Its affinity to other species is discussed. The species is easily distinguished from congeners by its calyx lobes 5–7 mm long, its funnel-shaped corolla, and its costate hypanthium and fruits.

Key words: Costa Rica, Faramea, Rubiaceae.

Faramea Aublet is a large genus of about 130 species, ranging from Mexico, Central America, and the West Indies throughout tropical South America (Burger & Taylor, 1993). During a field study in the northern zone of Costa Rica, a new species having subsessile, funnel-shaped flowers was found and is described here. Including this new species, there are 17 species of Faramea reported for Costa Rica, mainly in lowland rainforests.

Faramea zamorensis Al. Rodríguez, sp. nov. TYPE: Costa Rica. Alajuela: San Carlos, Boca Tapada, Cuenca del Río San Carlos, Finca San Jorge, 10°43′20″N, 84°11′50″W, 100 m, 10 Feb. 1996, Al. Rodríguez & A. Estrada 1067 (holotype, INB; isotypes, CR, MO). Figure 1.

Species facile distinguenda ob calyce lobulis 5–7 mm longis, corolla infundibuliformi, hypanthio costato a congeneris diversa.

Shrub 3 m tall, glabrous throughout; stem laterally flattened and remaining so with age. Leaves sessile or with petioles up to 1 mm long; blade elliptic to lance-elliptic, $10.5-18 \times 3.3-8.5$ cm, apex acuminate with slender tips 10-17 mm long, base cordate to subcordate, drying chartaceous, grayish green or blackish green above and below; secondary veins 10 to 16 per side, spreading widely, tertiary venation reticulated, thickened to slightly raised adaxially, slightly raised abaxially. Stipules interpetiolar, caducous, triangular, 5-11 mm long including arista, aristae 4-6 mm long. Flowers terminal, 2 or 3 per fascicle, peduncles 0-1.5 mm long, bracts ca. 7 mm long, linear-lanceolate, easily deciduous; pedicels 1.6-2 mm long, ebracteate, hypanthium turbinate, ribbed, 9-11 mm long; calyx lobes 5-7 mm long, linear, glabrous. Corolla funnel-shaped, violet and drying blackish, glabrous externally, tube ca. 18 mm long, slightly widening at mouth, ca. 1 mm diam. near the base and 2-3 mm diam. in the wider part, 4-lobed, with lobes 6-7 mm long, linear-triangular, acute and ascending. Ovary unilocular. Fruits drupaceous, leathery exocarp, subglobose, ca. 18 mm diam., ribs prominent when dried, glabrous, maturing bluish black, drying grayish black or grayish yellow, with persistent calyx tube and lobes, tube ca. 10 mm long and 3-4 mm diam.; seed 1 per fruit, globose, ca. 8 mm diam.

Table 1. Comparison of some characters of Faramea zamorensis, F. correae, F. sanblasensis, and F. permagnifolia.

	F. zamorensis	F. correae	F. sanblasensis	F. permagnifolia
Petiole (mm) Leaf base Inflorescence	0–1 subcordate-cordate 2 or 3 fasciculate flow- ers, terminal	ounded-subcordate 2 or 8 fasciculate flow- ers, terminal	O or subsessile rounded-subcordate many flowers in a con- gested cyme, termi- nal	1–5 rounded-truncate 3 or 6 fasciculate flow- ers, terminal
Hypanthium	ribbed	terete	terete	terete
Calyx lobes Corolla Lobe Fruit Distribution	5-7 mm funnel-shaped ascending ribbed northern Costa Rica and southern Nica- ragua	truncate salver-shaped divergent terete central Panama	truncate salver-shape divergent terete eastern Panama	truncate-denticulate salver-shaped divergent terete southern Costa Rica

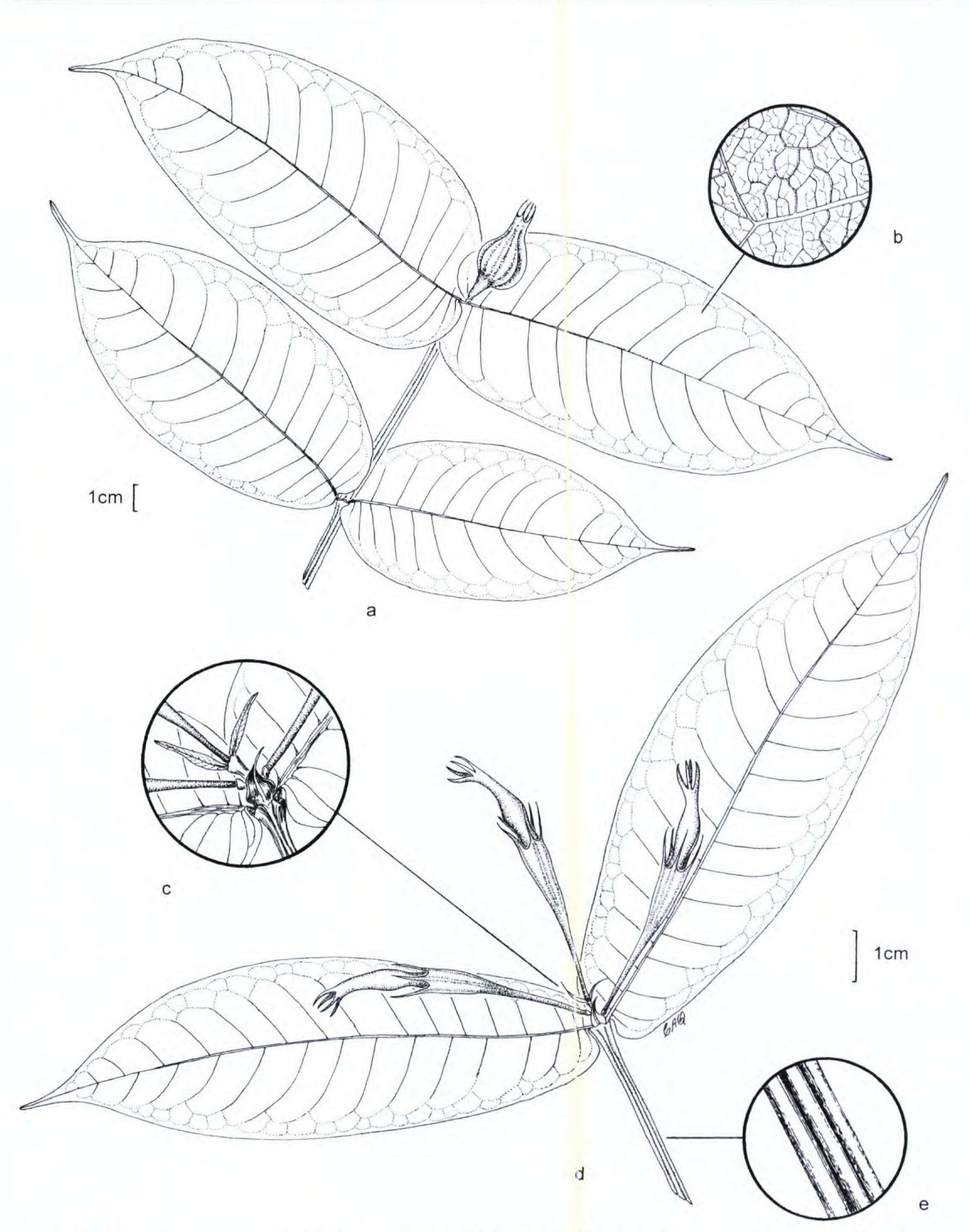


Figure 1. Faramea zamorensis Al. Rodríguez (Rodríguez & Estrada 1067). —a. Leaves and fruit. —b. Abaxial view of leaf showing tertiary venation. —c. Stipule. —d. Leaves and flowers. —e. Stem.

Phenology. Flowering in January and February; collected in fruit in both months.

Distribution. Known from wet forest in northern Costa Rica and in southern Nicaragua at 1–100 m. Faramea zamorensis has the narrowly triangular,

aristate stipules, unilocular ovary, and one-seeded fruit of most *Faramea* species. It is distinguished by its subsessile leaves, which are cordate or subcordate at the base, subsessile fasciculate flowers with a ribbed hypanthium, calyx lobes 5–7 mm

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long, funnel-shaped corolla, and ribbed fruit. Because of the slightly petiolate to sessile, basally cordate to subcordate leaves and congested inflorescences, this species is similar to *F. correae* C. M. Taylor, *F. sanblasensis* C. M. Taylor, and *F. permagnifolia* Dwyer ex C. M. Taylor. From all those it differs by its much longer calyx lobes, funnel-shaped rather than salverform corolla with ascending rather than divergent lobes, and the ribbed rather than terete hypanthium and fruit (see Table 1).

The specific epithet honors Nelson Zamora, a Costa Rican botanist and colleague, who also collected this species, and whose extensive work has

greatly advanced the knowledge of the country's flora.

Paratype. COSTA RICA. Alajuela: San Carlos, Boca Tapada, Cuenca del Río San Carlos, Finca San Jorge, 50 m, 2 Jan. 1997, Zamora 2549 (CR, INB, MO).

Literature Cited

- Dwyer, J. D. 1980. Rubiaceae. In: R. E. Woodson, Jr. & R. W. Schery et al. (editors), Flora of Panama. Ann. Missouri Bot. Gard. 67: 1–256.
- Burger, W. & C. M. Taylor. 1993. Rubiaceae. *In:* W. Burger (editor), Flora Costaricensis. Fieldiana, Bot. n.s. 33: 1–333.
- Taylor, C. M. 2001. Rubiaceae. Pp. 2206–2284 in: W. D. Stevens, C. Ulloa Ulloa, A. Pool & O. M. Montiel (editors), Flora de Nicaragua, Tomo III. Monogr. Syst. Bot. Missouri Bot. Gard. Vol. 85.